



RAW SEQUENCE LISTING

DATE: 03/12/2002

PATENT APPLICATION: US/09/466,568

TIME: 14:46:00

Input Set: N:\Crf3\RULE60\09466568.raw Output Set: N:\CRF3\03122002\I466568.raw

## SEQUENCE LISTING

```
3 (1) GENERAL INFORMATION:
             (i) APPLICANT: Crabtree, Gerald R.
                            Schreiber, Stuart L.
      7
                            Spencer, David M.
      8
                            Wandless, Thomas J.
     9
                            Belshaw, Peter
            (ii) TITLE OF INVENTION: REGULATED TRANSCRIPTION OF TARGETED
     11
                                     GENES AND OTHER BIOLOGICAL EVENTS
     12
           (iii) NUMBER OF SEQUENCES: 81
     14
                                                                 ENTERED
            (iv) CORRESPONDENCE ADDRESS:
                  (A) ADDRESSEE: ARIAD Pharmaceuticals, Inc.
     17
     18
                  (B) STREET: 26 Landsdowne Street
                  (C) CITY: Cambridge
     19
                  (D) STATE: Massachusetts
     20
     21
                  (E) COUNTRY: USA
     22
                  (F) ZIP: 02139
             (V) COMPUTER READABLE FORM:
     24
     25
                  (A) MEDIUM TYPE: Floppy disk
     26
                  (B) COMPUTER: IBM PC compatible
                  (C) OPERATING SYSTEM: PC/DOS/MS/DOS
     27
                  (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
     28
     30
            (vi) CURRENT APPLICATION DATA:
C--> 31
                  (A) APPLICATION NUMBER: US/09/466,568
                  (B) FILING DATE: 17-Dec-1999
C--> 32
     33
                  (C) CLASSIFICATION:
     35
           (vii) PRIOR APPLICATION DATA:
                  (A) APPLICATION NUMBER: US/09/157,753
     36
     37
                  (B) FILING DATE:
                  (A) APPLICATION NUMBER: 08/388,653
     39
     40
                  (B) FILING DATE: 14-FEB-1995
                  (A) APPLICATION NUMBER: US 08/478,386
     42
                  (B) FILING DATE: 07-JUN-1995
     43
     45
          (viii) ATTORNEY/AGENT INFORMATION:
     46
                  (A) NAME: Figg, E. Anthony
     47
                  (B) REGISTRATION NUMBER: 27,195
                  (C) REFERENCE/DOCKET NUMBER: 2054-114A
     48
     50
            (ix) TELECOMMUNICATION INFORMATION:
     51
                  (A) TELEPHONE: (202) 783-6040
     52
                  (B) TELEFAX: (202) 783-6031
     55 (2) INFORMATION FOR SEQ ID NO: 1:
             (i) SEQUENCE CHARACTERISTICS:
     57
     58
                  (A) LENGTH: 14 amino acids
```

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PATENT APPLICATION: US/09/466,568
                                                          TIME: 14:46:00
                Input Set : N:\Crf3\RULE60\09466568.raw
                Output Set: N:\CRF3\03122002\I466568.raw
59
             (B) TYPE: amino acid
             (D) TOPOLOGY: linear
60
       (ii) MOLECULE TYPE: peptide
62
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
65
67 Met Gly Ser Ser Lys Ser Lys Pro Lys Asp Pro Ser Gln Arg
                    5
                                         10
71 (2) INFORMATION FOR SEQ ID NO: 2:
        (i) SEQUENCE CHARACTERISTICS:
73
             (A) LENGTH: 11 base pairs
74
75
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: single
76
77
             (D) TOPOLOGY: linear
79
       (ii) MOLECULE TYPE: cDNA
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
82
                                                                             11
84 GTTAAGTTAA C
86 (2) INFORMATION FOR SEQ ID NO: 3:
        (i) SEQUENCE CHARACTERISTICS:
88
89
             (A) LENGTH: 11 base pairs
90
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: single
91
             (D) TOPOLOGY: linear
92
       (ii) MOLECULE TYPE: cDNA
94
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
97
                                                                             11
99 TGACTCAGCG C
101 (2) INFORMATION FOR SEQ ID NO: 4:
         (i) SEQUENCE CHARACTERISTICS:
103
104
              (A) LENGTH: 33 base pairs
105
              (B) TYPE: nucleic acid
106
              (C) STRANDEDNESS: single
107
              (D) TOPOLOGY: linear
        (ii) MOLECULE TYPE: cDNA
109
        (ix) FEATURE:
111
              (A) NAME/KEY: misc_feature
112
              (B) LOCATION: 6..11
113
              (D) OTHER INFORMATION: /note≈ "Sac II restriction site."
114
116
        (ix) FEATURE:
              (A) NAME/KEY: misc_signal
117
118
              (B) LOCATION: 12..16
119
              (D) OTHER INFORMATION: /note= "Kozak sequence."
121
        (ix) FEATURE:
              (A) NAME/KEY: CDS
122
123
              (B) LOCATION: 17..31
125
        (ix) FEATURE:
              (A) NAME/KEY: misc_feature
126
              (B) LOCATION: 17..33
127
              (D) OTHER INFORMATION: /note= "Region of homology with
128
129 target sequence."
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
                                                                                33
134 CGACACCGCG GCCACC ATG GCC ACA ATT GGA GC
```

RAW SEQUENCE LISTING

TIME: 14:46:00

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Input Set : N:\Crf3\RULE60\09466568.raw
                Output Set: N:\CRF3\03122002\1466568.raw
135
                      Met Ala Thr Ile Gly
136
                        1
139 (2) INFORMATION FOR SEQ ID NO: 5:
         (i) SEQUENCE CHARACTERISTICS:
141
142
              (A) LENGTH: 5 amino acids
143
              (B) TYPE: amino acid
144
              (D) TOPOLOGY: linear
146
        (ii) MOLECULE TYPE: protein
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
148
150 Met Ala Thr Ile Gly
151 1
154 (2) INFORMATION FOR SEQ ID NO: 6:
         (i) SEQUENCE CHARACTERISTICS:
156
157
              (A) LENGTH: 27 base pairs
              (B) TYPE: nucleic acid
158
159
              (C) STRANDEDNESS: single
              (D) TOPOLOGY: linear
160
        (ii) MOLECULE TYPE: cDNA
162
164
        (ix) FEATURE:
              (A) NAME/KEY: misc_feature
165
166
              (B) LOCATION: 6..11
              (D) OTHER INFORMATION: /note= "Xho I restriction site."
167
        (ix) FEATURE:
169
170
              (A) NAME/KEY: misc_feature
171
              (B) LOCATION: 12...27
              (D) OTHER INFORMATION: /note= "Region of homology with
173 target sequence."
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
178 CGACACTCGA GAGCCCATGA CTTCTGG
                                                                              27
181 (2) INFORMATION FOR SEQ ID NO: 7:
183
         (i) SEQUENCE CHARACTERISTICS:
184
              (A) LENGTH: 4 amino acids
              (B) TYPE: amino acid
185
              (C) STRANDEDNESS: single
186
187
              (D) TOPOLOGY: linear
189
        (ii) MOLECULE TYPE: peptide
192
        (ix) FEATURE:
193
              (A) NAME/KEY: Peptide
              (B) LOCATION: 1..4
194
              (D) OTHER INFORMATION: /note= "Translation product of
196 complement of SEQ ID NO:6, bases 9 to 20."
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
199
201 Ser Trp Ala Leu
202 1
205 (2) INFORMATION FOR SEQ ID NO: 8:
         (i) SEQUENCE CHARACTERISTICS:
207
208
              (A) LENGTH: 41 base pairs
209
              (B) TYPE: nucleic acid
210
              (C) STRANDEDNESS: single
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/466,568

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PATENT APPLICATION: US/09/466,568
                                                               TIME: 14:46:00
                     Input Set : N:\Crf3\RULE60\09466568.raw
                     Output Set: N:\CRF3\03122002\I466568.raw
     211
                   (D) TOPOLOGY: linear
     213
             (ii) MOLECULE TYPE: cDNA
     215
             (ix) FEATURE:
                   (A) NAME/KEY: misc_feature
     216
                   (B) LOCATION: 6..11
     217
     218
                   (D) OTHER INFORMATION: /note= "Xho I restriction site."
     220
             (ix) FEATURE:
     221
                   (A) NAME/KEY: misc_feature
     222
                   (B) LOCATION: 12..41
     223
                   (D) OTHER INFORMATION: /note= "Region of homology with
     224 target sequence."
             (ix) FEATURE:
     227
                   (A) NAME/KEY: CDS
     228
                   (B) LOCATION: 9..41
     230
             (ix) FEATURE:
     231
                   (A) NAME/KEY: misc_feature
     232
                   (B) LOCATION: 28
     233
                   (D) OTHER INFORMATION: /note= "A to G."
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
     236
     238 CGACACTC GAG CTC TGC TAC TTG CTA GGT GGA ATC CTC TTC
                                                                                   41
     239
                  Glu Leu Cys Tyr Leu Leu Gly Gly Ile Leu Phe
     243 (2) INFORMATION FOR SEQ ID NO: 9:
              (i) SEQUENCE CHARACTERISTICS:
     245
                   (A) LENGTH: 11 amino acids
     246
     247
                   (B) TYPE: amino acid
     248
                   (D) TOPOLOGY: linear
     250
             (ii) MOLECULE TYPE: protein
     252
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
     254 Glu Leu Cys Tyr Leu Leu Gly Gly Ile Leu Phe
     255 1
                          5
     258 (2) INFORMATION FOR SEQ ID NO: 10:
     260
              (i) SEQUENCE CHARACTERISTICS:
     261
                   (A) LENGTH: 24 base pairs
     262
                   (B) TYPE: nucleic acid
                   (C) STRANDEDNESS: single
     263
W--> 287
                   (D) TOPOLOGY: /note= "Translational stop encoded
     288
                                  in complementary strand."
     266
             (ii) MOLECULE TYPE: cDNA
     268
             (ix) FEATURE:
     269
                   (A) NAME/KEY: misc_feature
     270
                   (B) LOCATION: 3..8
     271
                   (D) OTHER INFORMATION: /note= "Eco RI restriction site."
     273
             (ix) FEATURE:
     274
                   (A) NAME/KEY: misc_feature
     275
                   (B) LOCATION: 9..24
     276
                   (D) OTHER INFORMATION: /note= "Region of homology with
     277 target sequence."
     279
             (ix) FEATURE:
```

RAW SEQUENCE LISTING

```
TIME: 14:46:00
                     PATENT APPLICATION: US/09/466,568
                     Input Set : N:\Crf3\RULE60\09466568.raw
                     Output Set: N:\CRF3\03122002\I466568.raw
                   (A) NAME/KEY: misc_feature
    280
                   (B) LOCATION: 24
     281
                   (D) OTHER INFORMATION: /note= "G to C."
     282
             (ix) FEATURE:
     284
                   (A) NAME/KEY: misc_signal
     285
                   (B) LOCATION: complement (9..11)
     286
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
     291
                                                                                   24
     293 GCGAATTCTT AGCGAGGGGC CAGC
     295 (2) INFORMATION FOR SEQ ID NO: 11:
              (i) SEQUENCE CHARACTERISTICS:
     297
                   (A) LENGTH: 4 amino acids
     298
                   (B) TYPE: amino acid
     299
                   (C) STRANDEDNESS: single
     300
                   (D) TOPOLOGY: linear
     301
             (ii) MOLECULE TYPE: peptide
     303
             (ix) FEATURE:
     306
                   (A) NAME/KEY: Peptide
     307
                   (B) LOCATION: 1..4
     308
                   (D) OTHER INFORMATION: /note= "Translational product of
     309
     310 complement to SEQ ID NO:10, bases 12 to 23."
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
     315 Leu Ala Pro Arg
     316 1
     318 (2) INFORMATION FOR SEQ ID NO: 12:
              (i) SEQUENCE CHARACTERISTICS:
     320
                    (A) LENGTH: 33 base pairs
     321
                    (B) TYPE: nucleic acid
     322
                    (C) STRANDEDNESS: single
     323
                    (D) TOPOLOGY: /note= "Translational stop signal
W--> 341
                                  encoded on complementary strand."
     342
             (ii) MOLECULE TYPE: cDNA
     326
             (ix) FEATURE:
     328
                    (A) NAME/KEY: misc_feature
     329
                    (B) LOCATION: 3..8
     330
                    (D) OTHER INFORMATION: /note= "Eco RI restriction."
     331
             (ix) FEATURE:
     333
                    (A) NAME/KEY: misc_feature
     334
                    (B) LOCATION: 12..17
     335
                    (D) OTHER INFORMATION: /note= "Sal I restriction site."
     336
             (ix) FEATURE:
     338
                    (A) NAME/KEY: misc_signal
     339
                    (B) LOCATION: complement (9..11)
     340
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
     351
                                                                                   33
     353 GCGAATTCTT AGTCGACGCG AGGGGCCAGG GTC
     355 (2) INFORMATION FOR SEQ ID NO: 13:
               (i) SEQUENCE CHARACTERISTICS:
     357
                    (A) LENGTH: 4 amino acids
     358
                    (B) TYPE: amino acid
     359
                    (C) STRANDEDNESS: single
     360
```

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 03/12/2002 PATENT APPLICATION: US/09/466,568 TIME: 14:46:01

Input Set : N:\Crf3\RULE60\09466568.raw
Output Set: N:\CRF3\03122002\1466568.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the  $\langle 220 \rangle$  to  $\langle 223 \rangle$  fields of each sequence which presents at least one n or Xaa.

Seq#:69; N Pos. 12,13,14,15,16,17,18,19,20

Seq#:70; Xaa Pos.3,4,5

Seq#:71; N Pos. 42,43,44,45,46,47,48,49,50

Seq#:72; Xaa Pos.13,14,15

Seq#:73; N Pos. 37,38,39,40,41,42,43,44,45

Seq#:74; Xaa Pos.9,10,11

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/466,568

DATE: 03/12/2002 TIME: 14:46:01

Input Set : N:\Crf3\RULE60\09466568.raw
Output Set: N:\CRF3\03122002\1466568.raw

```
L:31 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:32 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:287 M:220 C: Keyword misspelled or invalid format, [(D) TOPOLOGY:]
L:287 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=10
L:341 M:220 C: Keyword misspelled or invalid format, [(D) TOPOLOGY:]
L:341 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=12
L:1435 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:1484 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:1670 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:0
L:1734 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0
```